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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 08/720,092 | 09/27/1996 | ROBERT E. KAHN | 06154/008001 | 1226 |

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| EXAMINER |
|---|
| COURTENAY III, ST JOHN |

| ART UNIT | PAPER NUMBER |
|---|---|
| 2126 | |

DATE MAILED: 11/26/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

| Office Action Summary | Application No. 08/720,092 | Applicant(s) Kahn et al. |
|---|---|---|
| | Examiner St.John Courtenay III | Art Unit 2126 |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1) ☒ Responsive to communication(s) filed on *Nov 13, 2002*

2a) ☒ This action is **FINAL.** 2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

**Disposition of Claims**

4) ☒ Claim(s) *1-19 and 24-26* is/are pending in the application.

4a) Of the above, claim(s) _____ is/are withdrawn from consideratio

5) ☒ Claim(s) *5-17 and 24-26* is/are allowed.

6) ☒ Claim(s) *1, 18, and 19* is/are rejected.

7) ☒ Claim(s) *2-4* is/are objected to.

8) ☐ Claims _____ are subject to restriction and/or election requirement

**Application Papers**

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examine

If approved, corrected drawings are required in reply to this Office action.

12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) ☐ All b) ☐ Some* c) ☐ None of:

1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

a) ☐ The translation of the foreign language provisional application has been received.

15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). *28, 30*
4) ☐ Interview Summary (PTO-413) Paper No(s). _____
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

ST. JOHN COURTENAY III
PRIMARY EXAMINER

## Response to Amendment

Applicant's has amended the instant application to claim priority from co-pending U.S. patent application 08/453,486, filed on May 30, 1995, now abandoned, to remove the Vandenburg reference relied upon in the last office action.

### Response to arguments

- Applicant argues that it would not have been obvious to a person of ordinary skill to run a supervisor process that allows indirect access by a mobile program to service facilities (as in claim 1), with respect to the cited Antes and Steinburg references.

### Examiner's response

Steinberg teaches an operating environment running a supervisor process [e.g., administrative knowbots, page 3, line 3] that allows the mobile program indirect access to make use of the service facilities [page 3].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to improve upon the system taught by Antes by implementing the improvements detailed above because it would provide Antes's system with the enhanced capability of keeping unauthorized users out [e.g., page 3, line 4].

As previously argued, "administrative Knowbots" that "police the system, keeping unauthorized users out" must necessarily intercede between system access requests (e.g., from other "Knowbots") and the underlying local system service facilities. Steinberg teaches administrative Knowbots that police the system and keep unauthorized users out; however, authorized users are allowed access, albeit "indirect access" through "administrative Knowbots" that perform the disclosed security function.

The reason or motivation to modify the reference may often suggest what the inventor has done, but for a different purpose or to solve a different problem. It is not necessary that the prior art suggest the combination to achieve the same advantage or result discovered by applicant. In re Linter, 458 F.2d

1013, 173 USPQ 560 (CCPA 1972); In re Dillon, 919 F.2d 688, 16 USPQ2d 1897 (Fed. Cir. 1990), cert. denied , 500 U.S. 904 (1991).

With respect to claims 18 & 19, the Examiner provided a FAX copy of the cited Orfali reference in response to a telephone request by Applicant.

Orfali teaches maintaining a name space that uniquely identifies types of information to be interchanged as part of the communication [e.g., page 3, #7, i.e., "Register the run-time objects with the implementation repository" – see the disclosed "object reference" ], and using a name within the name space to identify a type of information to be interchanged [e.g., page 3, #7, i.e., "Register the run-time objects with the implementation repository"].

Applicant's arguments, filed Nov. 13, 2002, have been fully considered but they are not deemed to be persuasive. For the reasons detailed above, the rejections set forth in the previous office action under 35 U.S.C. 103 (i.e., the rejections that did not rely upon the cited Vanderburg reference) are maintained for claims 1, 18 & 19.

Claims 2-4 stand objected to as being dependent upon a rejected base claim.

Claims 5-17, 24, 25, & new claim 26 (depends upon claim 9) appear to be allowable, subject to the results of a final search.

## Claim Rejections - 35 U.S.C. § 103

**The following is a quotation of 35 U.S.C. § 103 which forms the basis for all obviousness rejections set forth in this Office action:**

> *A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.*

*Subject matter developed by another person, which qualifies as prior art only under subsection (f) or (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.*

**Claim 1 is rejected under 35 U.S.C. § 103 as being unpatentable over Antes, Gary M., "Let your 'knowbots' do the walking," Computerworld, May 13, 1991, pp(2), in view of Steinberg, Don, "Demon knowbots (intelligent software robots)," PC-Computing, v3, n1, pp(4), Jan, 1990.**

**As per claim 1:**
**Antes** discloses the invention substantially as claimed:

**Antes** teaches a method for use in a distributed system for processing a mobile program that has the ability to move from node to node in the distributed system [e.g., page 1, line 24].

**Antes** teaches an operating environment in each of the nodes that provides service facilities (e.g., databases) useful to the mobile program [e.g., page 1, line 30].

However, **Antes** does not *explicitly* disclose the following additional limitations:

**Steinberg** teaches an operating environment running a supervisor process [e.g., administrative knowbots, page 3, line 3] that allows the mobile program indirect access to make use of the service facilities [page 3].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to improve upon the system taught by **Antes** by implementing the improvements detailed above because it would provide **Antes's** system with the enhanced capability of keeping unauthorized users out [e.g., page 3, line 4].

**Claims 18 & 19 are rejected under 35 U.S.C. § 103 as being unpatentable over Antes, Gary M., "Let your 'knowbots' do the**

**walking," Computerworld, May 13, 1991, pp(2), in view of Steinberg, Don, "Demon knowbots (intelligent software robots)," PC-Computing, v3, n1, pp(4), Jan, 1990, and further in view of Orfali et al., "Client/Server Programming with CORBA Objects," OS/2 Magazine, Sept. 1994, pp(8).**

**As per independent claim 18:**
**Andtes**, as modified by **Steinberg**, teaches the invention substantially as claimed.

**Andtes**, as modified by **Steinberg**, teaches a method for aiding communication with a mobile program executing in operating environments provided at nodes of a distributed system (as discussed above in the rejection of claim 1).

However, **Andtes & Steinberg** do not *explicitly* disclose the following additional limitations:

**Orfali** teaches maintaining a name space that uniquely identifies types of information to be interchanged as part of the communication [e.g., page 3, #7, i.e., "Register the run-time objects with the implementation repository" – see the disclosed "object reference" ], and using a name within the name space to identify a type of information to be interchanged [e.g., page 3, #7, i.e., "Register the run-time objects with the implementation repository"].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to improve upon the combined system taught by **Andtes & Steinberg** by implementing the improvements detailed above because it would provide their system with the enhanced capability of knowing which object classes are supported on a particular server [Orfali, page 3, discussion #7].

**As per claim 19:**
**Andtes**, as modified by **Steinberg** and **Orfali**, teaches the mobile program registers an interface which includes the name of a type of information that is to be interchanged [e.g., **Orfali**, page 3, #7, i.e., "Register the run-time objects with the implementation repository"].

**THIS ACTION IS MADE FINAL.**

Applicant is reminded of the extension of time policy as set forth in 37 C.F.R. § 1.136(a).

A SHORTENED STATUTORY PERIOD FOR RESPONSE TO THIS FINAL ACTION IS SET TO EXPIRE THREE MONTHS FROM THE DATE OF THIS ACTION. IN THE EVENT A FIRST RESPONSE IS FILED WITHIN TWO MONTHS OF THE MAILING DATE OF THIS FINAL ACTION AND THE ADVISORY ACTION IS NOT MAILED UNTIL AFTER THE END OF THE THREE-MONTH SHORTENED STATUTORY PERIOD, THEN THE SHORTENED STATUTORY PERIOD WILL EXPIRE ON THE DATE THE ADVISORY ACTION IS MAILED, AND ANY EXTENSION FEE PURSUANT TO 37 C.F.R. § 1.136(a) WILL BE CALCULATED FROM THE MAILING DATE OF THE ADVISORY ACTION. IN NO EVENT WILL THE STATUTORY PERIOD FOR RESPONSE EXPIRE LATER THAN SIX MONTHS FROM THE DATE OF THIS FINAL ACTION.

How to Contact the Examiner:

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to St. John Courtenay III whose voice telephone number is (703) 308-5217. A voice mail service is also available at this number.

- **All responses sent by U.S. Mail should be mailed to:**
  **Commissioner of Patents and Trademarks**
  **Washington, D.C. 20231**

- **Hand-delivered responses should be brought to Crystal Park Two, 2021 Crystal Drive, Arlington. VA., Fourth Floor (Receptionist).** All hand-delivered responses will be handled and entered by the docketing personnel. Please do not hand deliver responses directly to the Examiner.

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PTO FAX NUMBERS:

- **AFTER-FINAL faxes must be signed and sent to: (703) 746-7238.**
- **OFFICIAL faxes must be signed and sent to: (703) 746-7239.**

All OFFICIAL faxes will be handled and entered by the docketing personnel. The date of entry will correspond to the actual FAX reception date unless that date is a Saturday, Sunday, or a Federal Holiday within the District of Columbia, in which case the official date of receipt will be the next business day. The application file will be promptly forwarded to the Examiner unless the application file must be sent to another area of the Office, e.g., Finance Division for fee charging, etc.

To avoid ongoing Washington D.C. area mail processing delays, the Examiner requests that Applicant direct all communications to the PTO by fax. All incoming faxes are securely stored on PTO computers that are dedicated to fax reception. If you send a fax, please do not send duplicate papers via U.S. mail.

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- Any inquiry of a general nature or relating to the status of this application should be directed to the TC 2100 Group receptionist: (703) 305-3900.

**Please direct inquiries regarding fees, paper matching, and other issues not involving the Examiner to:**
**Technical Center 2100 CUSTOMER SERVICE: 703 306-5631**

Normal Flex work schedule: M – F 7:30 AM – 4:00 PM

ST. JOHN COURTENAY III
PRIMARY EXAMINER